

# Unit 3: CITIES OF THE FUTURE

## TEST 1

Mark the letter A, B, C, or D on your answer sheet to indicate the word whose underlined part differs from that of the other three in pronunciation in each of the following questions.

- Question 1: A. path                      B. article                      C. interact                      D. apple  
Question 2: A. cycle                      B. privacy                      C. community                      D. centre

Mark the letter A, B, C, or D on your answer sheet to indicate the word that differs from the other three in the position of stress in each of the following questions.


- Question 3: A. sensor                      B. urban                      C. dweller                      D. advice  
Question 4: A. efficient                      B. livable                      C. negative                      D. interesting


Mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the following questions.


- Question 5: As cities become smarter, city \_\_\_\_\_ will enjoy improved public services and greater connectivity.  
A. neighbours                      B. individuals                      C. suburbs                      D. dwellers  
Question 6: Now, the room \_\_\_\_\_ pleasant thanks to the fragrant bow.  
A. is smelling                      B. was smelling                      C. has smelled                      D. smells  
Question 7: Automated systems will help businesses \_\_\_\_\_ more efficiently, saving time and resources.  
A. provide                      B. operate                      C. predict                      D. include  
Question 8: Access to green spaces is essential for maintaining a high \_\_\_\_\_ of life in urban areas.  
A. quality                      B. traffic                      C. variety                      D. device  
Question 9: A strong \_\_\_\_\_ of community is essential for creating a supportive environment in the city.  
A. attraction                      B. sense                      C. key                      D. privacy


Read the following advertisement/announcement and mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks from 10 to 15.

### Welcome to SmartCity - Your Future Home!

 **Smart Living:** (10) \_\_\_\_\_ homes with cutting-edge technology designed to make life effortless and enjoyable.

 **Green Spaces:** Enjoy fresh air and nature with (11) \_\_\_\_\_ parks and green corridors throughout the city.

 **Connected Community:** Stay connected with ultra-fast internet and vibrant community events.

 **Sustainable Transport:** Travel with ease using (12) \_\_\_\_\_ buses, smart bikes, and pedestrian-friendly streets.

Join us at SmartCity - The Future is Now.

Visit [www.smartcity-future.com](http://www.smartcity-future.com).

- Question 10: A. Impact                      B. Suffer                      C. Experience                      D. Sell  
Question 11: A. a                      B. an                      C. the                      D. Ø (no article)  
Question 12: A. private                      B. eco-friendly                      C. reusable                      D. lasting

### Announcement: Urban Sustainability Conference 2024

We are excited to announce the upcoming **Urban Sustainability Conference 2024**, taking place on **September 15-17, 2024**, at the **GreenTech Convention Center**.

This event will bring together city planners, environmental experts, and tech (13)\_\_\_\_\_ to discuss the future of (14)\_\_\_\_\_ urban living. Topics will include smart city development, green energy solutions, and eco-friendly transportation.

Don't miss this opportunity to be part of (15)\_\_\_\_\_ the cities of tomorrow.

Register now at [www.urbansustain2024.com](http://www.urbansustain2024.com).

For more information, please contact us at [info@urbansustain2024.com](mailto:info@urbansustain2024.com).

We look forward to seeing you there!

- Question 13:** A. innovate                      B. innovation                      C. innovative                      D. innovators  
**Question 14:** A. sustainable                      B. impossible                      C. industrial                      D. serious  
**Question 15:** A. shape                      B. shaping                      C. to shaping                      D. to shape

*Mark the letter A, B, C, or D on your answer sheet to indicate the correct arrangement of the sentences to make a meaningful paragraph/letter in each of the following questions.*

**Question 16:**

- a. This connectivity ensures that residents can manage their homes, work, and social lives with ease.
- b. Smart cities are designed to be highly connected, integrating various technologies into everyday life.
- c. Moreover, the efficiency of smart cities contributes to a more sustainable and eco-friendly urban environment.
- d. As a result, residents of smart cities can experience a higher quality of life with less environmental impact.
- e. One of the most significant advantages of living in a smart city is the seamless integration of technology.

- A. a - b - d - e - c                      B. e - b - a - c - d  
C. e - b - a - c - d                      D. a - d - b - c - e

**Question 17:**

- a. Smart cities are designed to enhance the quality of life for their residents by using cutting-edge technology and sustainable practices.
- b. I strongly believe that these innovations will shape the future of urban living, making cities more efficient and eco-friendly.
- c. Dear future residents,
- d. Furthermore, smart cities offer improved public services, better transportation, and greater energy efficiency.
- e. Thank you for considering making this smart choice for your future home.
- f. By choosing to live in a smart city, you are investing in a lifestyle that is both convenient and responsible.

- A. c - d - a - f - e - b                      B. c - a - f - d - b - e  
C. c - a - d - f - b - e                      D. c - f - a - b - d - e

*Mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks from 18 to 23.*

The cities of the future (18)\_\_\_\_\_ from the urban landscapes we know today. As we look ahead, several key characteristics are expected to define these next-generation urban centers:

Future cities will (19) \_\_\_\_\_ that integrates everything from transportation to energy management. Smart sensors, AI-driven systems, and the Internet of Things (IoT) will ensure that resources are used efficiently, minimizing waste and optimizing urban living.

Environmental sustainability will be at the core of future city development. (20) \_\_\_\_\_ will prioritize green energy sources, reduce carbon footprints, and implement waste management systems that promote recycling and composting. Urban planning will include extensive green spaces, vertical gardens, and eco-friendly buildings (21) \_\_\_\_\_.

In future cities, connectivity will extend beyond just the internet. Seamless communication between devices, infrastructure, and people will create a highly interconnected environment. Public transportation, healthcare, and emergency services will be more responsive and efficient, thanks to real-time data sharing and automated systems.

Cities of the future will be built to withstand and (22) \_\_\_\_\_ by climate change, natural disasters, and other unforeseen events. This resilience will be achieved through innovative building designs, flexible infrastructure, and comprehensive disaster preparedness strategies.

Above all, future cities will focus on improving the quality of life for their inhabitants. This will include not only the physical environment (23) \_\_\_\_\_. Cities will promote community engagement, offer a diverse range of cultural and recreational activities, and prioritize public health and well-being.

*Reference: energyinformatics.springeropen*

**Question 18:** A. set to be dramatically different  
B. are set to be different dramatically  
C. be set different dramatically  
D. are set to be dramatically different

**Question 19:** A. equip with advanced technology  
B. be equipped with advanced technology  
C. have equip with advanced technology  
D. equip with significantly advanced technology

**Question 20:** A. These cities  
B. That city  
C. This city  
D. Those cities

**Question 21:** A. to enhance air quality and biodiversity  
B. enhance air quality and biodiversity  
C. with enhance air quality and biodiversity  
D. to enhance air and biodiversity of quality

**Question 22:** A. adapt to the challenges pose  
B. adapted to the challenges pose  
C. be adapted to the challenges pose  
D. adapt to the challenges posed

**Question 23:** A. neither social and cultural aspects  
B. but also social and cultural aspects  
C. either but also social and cultural aspects  
D. both but also social and cultural aspects

**Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct option that best fits each of the numbered blanks from 24 to 28.**

With the rise of greenhouse gases, debris in our oceans, and trash in our streets, smart cities are fighting back to reduce negative effects on the environment. Energy-efficient buildings, air quality (24) \_\_\_\_\_, and renewable energy sources are providing cities with new tools to shrink their ecological impact.

Deploying air quality sensors around a city, for instance, can provide data to track peak times of low air quality, identify pollution causes, and deliver data analytics officials need to develop (25) \_\_\_\_\_ action plans. These sensors can help lay a foundation for reducing air pollution in even the most populated cities, something (26) \_\_\_\_\_ is sure to save lives since medical problems related to pollution claim millions of lives each year. (27) \_\_\_\_\_, the City of Chicago, installed nodes to serve as a “fitness tracker” for the city, measuring factors that impact livability in Chicago such as climate, air quality and noise to help(28) \_\_\_\_\_ heavy vehicle traffic, identify standing water in real time to prevent property damage and

illness and observe which areas of the city are heavily populated by pedestrians at different times of day to suggest safe and efficient routes for walking to improve pedestrian safety.

*Adapted from*

*plantemoran.com*

- Question 24:** A. founders                      B. assistants                      C. sensors                      D. natives  
**Question 25:** A. much                              B. many                              C. every                              D. another  
**Question 26:** A. that                              B. whom                              C. whose                              D. what  
**Question 27:** A. Such as                      B. However                      C. Therefore                      D. For example  
**Question 28:** A. affect                              B. detect                              C. cover                              D. replace

**Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 29 to 33.**

While smart cities offer numerous benefits to city dwellers, **they** also present several challenges that must be carefully considered.

One of the most **pressing** issues in a smart city is the secure management of sensitive information. To make informed decisions, a variety of data—ranging from energy consumption to personal details like CCTV footage—must be collected. However, this raises concerns about data security and privacy. The local government must ensure that this information is handled with the highest level of security and is resilient against cyber attacks. Additionally, the collection and use of personal data by authorities can lead to increased social control, which poses significant privacy concerns.

Many companies in the smart city sector are relatively new, with business models that have not yet been fully tested or proven profitable. Despite significant investment from cities, these companies need to establish sustainable business practices to ensure long-term viability. Furthermore, the operation of smart cities requires a workforce equipped with specialized skills, which are currently in short supply. To address this gap, cities need to invest in training and educational programs to prepare workers, government officials, and citizens for the demands of a smart city.

Transforming an urban area into a smart city requires substantial investment. Buildings need to be renovated or fitted with IoT sensors and high-speed internet connections, and public transport and infrastructure must be upgraded with smart technology. These improvements come with high costs, and cities must carefully evaluate what is necessary to achieve the desired transformation.

*Reference: smart-cre*

**Question 29:** What would be the best title for the passage?

- A. The Challenges of Smart Cities
- B. The Future of Urban Living
- C. How to Build a Smart City
- D. The Impact of Technology on Modern Cities

**Question 30:** What does the word "**pressing**" in the passage mostly mean?

- A. simple                              B. urgent                              C. simple                              D. general

**Question 31:** What is a significant challenge mentioned in the passage regarding smart city companies?

- A. Their reliance on outdated technology
- B. Their need for more financial investment
- C. Their unproven and untested business models
- D. Their lack of government support

**Question 32:** According to the passage, what is a critical requirement for smart cities to function properly?

- A. Universal access to the internet
- B. Sufficient investment in infrastructure
- C. A workforce with specialized skills
- D. A reduction in government control

**Question 33:** What does the word “they” in paragraph 1 refer to?

- A. city dwellers
- B. smart cities
- C. benefits
- D. challenges

*Read the following passage and mark the letter A, B, C, or D on your answer sheet to indicate the correct answer to each of the questions from 34 to 40.*

London, the capital of the United Kingdom, is recognized as the smartest city in the world. This achievement is largely due to the “Smarter London Together” initiative led by Mayor Sadiq Khan, **which** outlines goals for enhancing the city's infrastructure. The strategy focuses heavily on improving traffic flow and reducing congestion through technologies such as the congestion charge, contactless payment, and the ultra-low emission zone. Data collected from cameras and sensors helps manage these systems. Additionally, London encourages walking by providing an app with walking routes, aiming for 80% of journeys to be on foot, by bicycle, or via public transport. The city also supports businesses in the smart city sector by making **extensive** city data available for developing new technologies.

New York, the most populous city in the United States, is another leader in smart city development. Facing challenges related to environmental sustainability, New York launched the Smart Cities Programme, upgrading over 600 government buildings with energy-saving LED lighting systems. Smart meters were also installed in various properties to maintain sustainable water use, with sensors that alert residents to leaks. Air-quality sensors and an **optimized** traffic control system further enhance the city's environment. New York also supports smart city innovations through the Smart Cities Innovation Partnership, offering up to \$1 million in funding to companies developing new technologies.

Paris ranks as the third smartest city globally according to the IESE Index. The city has made significant strides toward becoming a smart and sustainable metropolis, particularly in response to issues like low air quality, limited green spaces, and high congestion. To improve air quality, Paris promotes electric cars and public transport, with Renault testing an induction charging system for easier car charging. Paris is also transforming into a “15-minute city,” where all essential services are within a 15-minute walk. Efforts to green the city include the creation of the largest urban farm, with plans for more parks and roof gardens.

*Reference: smart-cre*

**Question 34:** What would be the best title for the passage?

- A. The Role of Technology in Modern Cities
- B. The Development of Smart Cities
- C. How Cities are Becoming Smarter
- D. The Future of Urban Innovation

**Question 35:** The word “**extensive**” in paragraph 1 is opposite in meaning to \_\_\_\_\_.

- A. Limited
- B. Widespread
- C. Unique
- D. Optional

**Question 36:** What is the primary purpose of the Smart Cities Innovation Partnership in New York?

- A. To create urban farms
- B. To encourage the use of electric vehicles
- C. To provide financial support for developing smart technologies
- D. To improve air quality

**Question 37:** The word “**optimized**” in paragraph 2 is closest in meaning to \_\_\_\_\_.

- A. Improved
- B. delayed
- C. reduced
- D. complicated

**Question 38:** What does the word "**which**" in paragraph 1 refer to?

- A. Smarter London Together
- B. Mayor Sadiq Khan
- C. the United Kingdom
- D. London

**Question 39:** Which of the following statements is **NOT** true according to the passage?

- A. London uses cameras and sensors to help manage traffic congestion.
- B. New York has upgraded over 600 government buildings with LED lighting systems.
- C. Paris has focused on reducing air quality by encouraging public transport and electric cars.
- D. The "Smarter London Together" initiative aims to improve the city's infrastructure.

**Question 40:** Which of the following can be inferred about the traffic control systems in both London and New York?

- A. They primarily rely on human intervention.
- B. They are completely independent of technological inputs.
- C. They use technology to manage and optimize traffic flow.
- D. They have not been fully implemented yet.